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INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)		APPLICANT(S) Patrice MARCHE et al.		
		FILING DATE July 21, 2006		GROUP
<b>U.S. PATENT DOCUMENTS</b>				
Examiner Initials	Cite No.	Document Number	Date	Name
<b>FOREIGN PATENT DOCUMENTS</b>				
Examiner Initials	Cite No.	Document Number	Date	Country
1	WO 01/31021 A1	5/03/2001	WIPO	X
2	WO 01/031021 A1 (Corrected)	5/03/2001	WIPO	X
3	WO 03/035110 A1	5/01/2003	WIPO	X
4	WO 01/16171	3/08/2001	WIPO	X
5	WO 95/21256	8/10/1995	WIPO	X
6	WO 99/67395	12/29/1999	WIPO	X
<b>OTHER DOCUMENTS</b>				
Examiner Initials	Cite No.	(Including Author, Title, Date, Pertinent Pages, etc.)		
7	Conrad, Bernard et al. "A Human Endogenous Retroviral Superantigen as Candidate Autoimmune Gene in Type I Diabetes," <i>Cell</i> , Vol. 90, pp. 303-313, July 25, 1997.			
8	Perron, H. et al. "Molecular identification of a novel retrovirus repeatedly isolated from patients with multiple sclerosis," <i>Proc. National Academy of Science USA</i> , Vol. 94, pp. 7583-7588, July 1997.			
9	Deh-Rinker, Paromita et al. "Molecular Characterization of a MSRV-like Sequence Identified by RDA from Monozygotic Twin Pairs Discordant for Schizophrenia," <i>Genomics</i> , Vol. 61, pp. 133-144, 1999.			
10	Perron, H. et al. "Isolation of a Retrovirus from Patients with Multiple Sclerosis," <i>The Lancet</i> , Vol. 337, pp. 862-863, April 6, 1991.			
11	Blond, Jean-Luc et al. "Molecular Characterization and Placental Expression of HERV-W, a New Human Endogenous Retrovirus Family," <i>Journal of Virology</i> , Vol. 73, No. 2, pp. 1175-1185, February 1999.			
12	Perron, Hervé et al. "Particle-associated retroviral RNA and tandem RGH/HERV-W copies on human chromosome 7q: possible components of a 'chain-reaction' triggered by infectious agents in multiple sclerosis?," <i>Journal of NeuroVirology</i> , Vol. 16, Supplement 2, pp. S67-S75, 2000.			
13	Dolci, A. et al. "Multiple sclerosis-associated retrovirus (MSRV) in Sardinian MS patients," <i>Neurology</i> , Volume 58, pp. 471-473, 2002.			
14	Garson, J. A. et al. "Detection of virion-associated MSRV-RNA in serum of patients with multiple sclerosis," <i>The Lancet</i> , Volume 351, p. 33, January 3, 1998.			
15	Olsson, Patrik et al. "Retroviral RNA Related to ERV9/MSRV in a Human Serum: A New Sequence Variant," <i>Aids Research and Human Retroviruses</i> , Volume 15, No. 6, pp. 591-593, 1999.			
16	Sotgiu, S. et al. "Multiple sclerosis-associated retrovirus and MS prognosis; an observational study," <i>Neurology</i> , Volume 59, pp. 1071-1073, 2002.			
17	Perron, H. et al. "Multiple Sclerosis Retrovirus Particles and Recombinant Envelope Trigger an Abnormal Immune Response <i>in Vitro</i> , by Inducing Polyclonal V <sub>8</sub> 16 T-Lymphocyte Activation," <i>Virology</i> , Volume 287, pp. 321-332, 2001.			
18	Firouzi, R. et al. "Multiple sclerosis-associated retrovirus particles cause T-lymphocyte-dependent death with brain hemorrhage in humanized SCID mice model," <i>Journal of Neuropathology and Experimental Neurology</i> , Volume 62, pp. 79-93, 2003.			

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /Z.L./

Date: January 4, 2007

/Zachariah Lucas/

10/29/2008

	19	Lin, A. et al. "The inflammatory response system in treatment-resistant schizophrenia: increased serum interleukin-6," <i>Schizophrenia Research</i> , Vol. 32, pp. 9-15, 1998.
	20	Stevens, Janice R. "Neuropathology of Schizophrenia," <i>Arch. Gen. Psychiatry</i> , Volume 39, pp. 1131-1139, October 1982.
	21	Karlsson, Hakan et al. "Retroviral RNA Identified in the cerebrospinal fluids and brains of individuals with schizophrenia," <i>PNAS</i> , Volume 98, No. 8, pp. 4634-4639, April 10, 2001.
	22	Perron, H. et al. "Microbial Agents Triggering Endogenous Retroviruses within Genetic Susceptibility Loci Resulting in Expression of Superantigen and Gliotoxic Molecules: a plausible 'Immunovirogenic' Cascade Causing Multiple Sclerosis," <i>Mod. Asp. Immunobiol.</i> , Volume 1, No. 5, pp. 198-203, 2001.
	23	Liu, Yuxin et al. "Dextromethorphan Protects Dopaminergic Neurons against Inflammation-Mediated Degeneration through Inhibition of Microglial Activation," <i>Journal of Pharmacology and Experimental Therapeutics</i> , Vol. 305, pp. 212-218, 2003.
	24	Morimoto, Kiyoshi et al. "Acute Neuroinflammation Exacerbates Excitotoxicity in Rat Hippocampus <i>In Vivo</i> ," <i>Experimental Neurology</i> , Vol. 177, pp. 95-104, 2002.
	25	Stoll, O. "Inflammatory cytokines in the nervous system: multifunctional mediators in autoimmunity and cerebral ischemia," <i>Rev. Neurol.</i> , Vol. 158, No. 10, pp. 887-891, 2002.
	26	Guillemin, Gilles J. et al. "Implications of the kynureine pathway and quinolinic acid in Alzheimer's disease," <i>Redox Report</i> , Vol. 7, No. 4, 2002.
	27	Kim, Eun-Joo et al. "Neuroprotective Effects of Prostaglandin E <sub>2</sub> or cAMP Against Microglial and Neuronal Free Radical Mediated Toxicity Associated With Inflammation," <i>Journal of Neuroscience Research</i> , Vol. 70, pp. 97-107, 2002.
	28	Kim, Won-Gon. "Regional Difference in Susceptibility to Lipopolysaccharide-Induced Neurotoxicity in the Rat Brain: Role of Microglia," <i>Journal of Neuroscience</i> , Vol. 20, pp. 6309-6316, August 15, 2000.
	29	Klein, Christine et al. "Association Studies of Parkinson's Disease and <i>parkin</i> Polymorphisms," Letters to the Editor: <i>Annals of Neurology</i> , Vol. 48, No. 1, pp. 125-127, July 2000.
	30	Llicino, J. et al. "The Role of inflammatory mediators in the biology of major depression: central nervous system cytokines modulate the biological substrate of depressive symptoms, regulate stress-responsive systems, and contribute to neurotoxicity and neuroprotection," <i>Molecular Psychiatry</i> , Vol. 4, pp. 317-327, 1999.
	31	Cotter, Robin et al. "Insights into the neurodegenerative process of Alzheimer's disease: a role for mononuclear phagocyte-associated inflammation and neurotoxicity," <i>Journal of Leukocyte Biology</i> , Vol. 65, pp. 416-427, April 1999.
	32	Heese, Klaus. "Inflammatory Signals Induce Neuropontin Expression in Human Microglial Cells," <i>Journal of Neurochemistry</i> , Vol. 70, No. 2, pp. 699-707, 1998.
	33	Sasser, L. B. et al. "Subchronic Toxicity Evaluation of Lewisite in Rats," <i>Journal of Toxicology and Environmental Health</i> , Vol. 47, pp. 321-334, 1996.
	34	Chao, Chun C. "Interleukin-1 and Tumor Necrosis Factor- $\alpha$ Synergistically Mediate Neurotoxicity: Involvement of Nitric Oxide and of N-Methyl-D-aspartate Receptors," <i>Brain, Behavior and Immunity</i> , Vol. 9, pp. 355-365, 1995.
	35	Chao, Chun C. et al. "Tumor Necrosis Factor-Alpha Potentiates Glutamate Neurotoxicity in Human Fetal Brain Cell Cultures," <i>Dev. Neurosci.</i> , Vol. 16, pp. 172-179, 1994.
	36	Bal-Price, Anna et al. "Inflammatory Neurodegeneration Mediated by Nitric Oxide from Activated Glia-Inhibition Neuronal Respiration, Causing Glutamate Release and Excitotoxicity," <i>Journal of Neuroscience</i> , Vol. 21, No. 17, pp. 6430-6451, September 2001.
	37	Obrenovich, T. P. "Quinolinic Acid Accumulation During Neuroinflammation," <i>Annals New York Academy of Sciences</i> , Vol. 239, pp. 1-10, 2001.
	38	Law, A. et al. "Say NO to Alzheimer's disease: the putative links between nitric oxide and dementia of the Alzheimer's type," <i>Brain Research Reviews</i> , Vol. 35, pp. 73-96, 2001.
	39	Werner, P. et al. "Glutamate excitotoxicity—a mechanism for axonal damage and oligodendrocyte death in Multiple Sclerosis?," <i>Journal Neural Transm.</i> , Vol. 60, Supplement, pp. 375-385, 2000.
	40	Pitt, David et al. "Glutamate excitotoxicity in a model of multiple sclerosis," <i>Nature Medicine</i> , Vol. 6, No. 1, pp. 67-70, January 2000.
	41	Carson, Noel G. et al. "Inflammatory Cytokines IL-1 $\alpha$ , IL-1 $\beta$ , IL-6, and TNF- $\alpha$ Impart Neuroprotection to an Excitotoxin Through Distinct Pathways," <i>Journal of Immunology</i> , Vol. 163, pp. 3963-3968, 1999.
	42	Wang, Yushan S. et al. "The Bacterial Endotoxin Lipopolysaccharide Causes Rapid Inappropriate Excitation in Rat Cortex," <i>Journal of Neurochemistry</i> , Vol. 72, No. 2, pp. 652-660, 1999.
	43	Yolken, R. H. "Endogenous Retroviruses and Schizophrenia," <i>Brain Research Reviews</i> , Vol. 31, pp. 193-199, 2000.
	44	Kleine, Tilman O. et al. "Approach to discriminate subgroups in multiple sclerosis with cerebrospinal fluid (CSF) basic inflammation indices and TNF- $\alpha$ , IL-1 $\alpha$ , IL-6, IL-8," <i>Brain Research Bulletin</i> , Vol. 61, pp. 327-346, 2003.
	45	Aarli, Johan A. "Role of Cytokines in Neurological Disorders," <i>Current Medicinal Chemistry</i> , Vol. 10, pp. 1931-1937, 2003.

	40	Vladic, Anton et al. "Cerebrospinal Fluid and Serum Protein Levels of Tumour Necrosis Factor-Alpha (TNF- $\alpha$ ), Interleukin-6 (IL-6) and Soluble Interleukin-6 Receptor (sIL-6R gp80) in Multiple Sclerosis Patients." <i>Cytokine</i> , Vol. 20, No. 2, pp. 86-89, Oct. 21, 2002.
	41	Miljkovic, Dj. et al. "Nitric oxide metabolites and interleukin-6 in Cerebrospinal fluid from multiple sclerosis patients," <i>European Journal of Neurology</i> , Vol. 9, pp. 413-418, 2002.
	42	Clerici, Mario. "Single-cell analysis of cytokine production shows different immune profiles in multiple sclerosis patients with active or quiescent disease," <i>Journal of Neuroimmunology</i> , Vol. 121, pp. 88-101, 2001.
	43	Fedetz, Maria. "The -174/-597 promoter polymorphisms in the interleukin-6 gene are not associated with susceptibility to multiple sclerosis," <i>Journal of Neurological Sciences</i> , Vol. 190, pp. 69-72, 2001.
	44	Stelmasiak, Zbigniew et al. "IL-6 and sIL-6R concentration in the cerebrospinal fluid and serum of MS patients," <i>Med Sci Monit</i> , Vol. 7, No. 5, pp. 914-918, 2001.
	45	Vandenbroucke, K. "High-resolution analysis of IL-6 minisatellite polymorphism in Sardinian multiple sclerosis: effect on course and onset of disease." <i>Genes and Immunology</i> , Vol. 1, pp. 460-463, 2000.
	46	Stelmasiak, Zbigniew. "Interleukin-6 concentration in serum and cerebrospinal fluid in multiple sclerosis patients," <i>Med Sci Monit</i> , Vol. 6, No. 6, pp. 1104-1108, 2000.
	47	Schonrock, Lisa et al. "Interleukin-6 expression in human multiple sclerosis lesions," <i>Neuroscience Letters</i> , Vol. 294, pp. 45-48, 2000.
	48	Cornford, Eain M. et al. "New systems for delivery of drugs to the brain in neurological disease," <i>Lancet Neurology</i> , Vol. 1, pp. 306-315, September 2002.
	49	Schmidt, Jens et al. "Drug targeting by long-circulating liposomal glucocorticosteroids increases therapeutic efficacy in a model of multiple sclerosis," <i>Brain</i> , Vol. 126, pp. 1895-1904, 2003.
	50	Partridge, William M. "Blood-Brain Barrier Drug Targeting Enables Neuroprotection in Brain Ischemia Following Delayed Intravenous Administration of Neurotrophins," <i>Adv Exp Med Biol</i> , pp. 397-430, 2002.
	51	Watanabe, Satoru et al. "Chemotherapeutic Targeting of Biopositive to Regions of the Brain on the Basis of Polyamine Level," <i>Journal of Drug Targeting</i> , Vol. 10, No. 6, pp. 457-461, 2002.
	52	Lahiri, Debomoy K. et al. "A Critical Analysis of New Molecular Targets and Strategies for Drug Developments in Alzheimer's Disease," <i>Current Drug Targets</i> , Vol. 4, pp. 17-12, 2003.
	53	Schermann, J. M. "Drug delivery to brain via the blood-brain barrier," <i>Vascular Pharmacology</i> , Vol. 38, pp. 349-354, 2002.
	54	Wang, Jian-Xin et al. "Enhanced brain targeting by synthesis of 3', 5'-dioctanoyl-5-fluoro-2'-deoxyuridine and incorporation into solid lipid nanoparticles," <i>European Journal of Pharmaceuticals and Biopharmaceuticals</i> , Vol. 54, pp. 285-290, 2002.
	55	Doan, Kelly M. Maher et al. "Passive Permeability and P-Glycoprotein-Mediated Efflux Differentiate Central Nervous System (CNS) and Non-CNS Marketed Drugs," <i>Journal of Pharmacology and Experimental Therapeutics</i> , Vol. 303, pp. 1029-1037, 2002.
	56	Hosoya, Kei-ichi et al. "Recent advances in the brain-to-blood efflux transport across the blood-brain barrier," <i>International Journal of Pharmaceutics</i> , Vol. 249, pp. 15-29, 2002.
	57	Mora, Margarita. "Design and Characterization of Liposomes Containing Long-Chain N-AcylPE, for Brain Delivery: Penetration of Liposome Incorporating GM-1 into the Rat Brain," <i>Pharmaceutical Research</i> , Vol. 19, No. 10, October 2002.
	58	Perron, H. et al. "Herpes simplex virus ICP0 and ICP4 immediate early proteins strongly enhance expression of a retrovirus harboured by a leptomeningeal cell line from a patient with multiple sclerosis," <i>Journal of General Virology</i> , Vol. 74, pp. 65-72, 1993.
	59	Soldan, Samantha S. "Association of human herpes virus 6 (HHV-6) with multiple sclerosis: Increased IgM response to HHV-6 early antigens and detection of serum HHV-6 DNA," <i>Nature Medicine</i> , Vol. 3, No. 12, pp. 1394-1397, 1997.
	60	Haahr, S. "Is Multiple Sclerosis Caused by a Dual Infection with Retrovirus and Epstein-Barr Virus?" <i>Neuroepidemiology</i> , Vol. 11, pp. 229-233, 1992.
	61	Bergstrom, Tomas et al. "Isolation of Herpes Simplex Virus Type 1 During First Attack of Multiple Sclerosis," <i>Acta Neurol</i> , Vol. 26, pp. 283-285, 1989.
	62	Mass, Christine E. et al. "Cytokine Effects on Cortical Neuron MAP-2 Immunoreactivity: Implications for Schizophrenia," <i>Biol Psychiatry</i> , Vol. 50, pp. 743-749, 2001.
	63	Maes, Michael et al. "Effects of atypical antipsychotics on the inflammatory response system in schizophrenic patients resistant to treatment with typical neuroleptics," <i>European Neuropsychopharmacology</i> , Vol. 10, pp. 119-124, 2000.
	64	Minagar, Alireza et al. "The role of macrophage/microglia and astrocytes in the pathogenesis of three neurologic disorders: HIV-associated dementia, Alzheimer's disease, and multiple sclerosis," <i>Journal of the Neurological Sciences</i> , Vol. 203, pp. 13-23, 2002.
	65	Jehn, Gwang-Ho et al. "Go6976 Protects Mesencephalic Neurons from Lipopolysaccharide-Elicited Death by Inhibiting p38 MAP Kinase Phosphorylation," <i>Annals New York Academy of Sciences</i> , pp. 347-359.
	66	Gaser, Christian et al. "Ventricular Enlargement in Schizophrenia Related to Volume Reduction of the Thalamus, Striatum, and Superior Temporal Cortex," <i>American Journal of Psychiatry</i> , Vol. 161, pp. 154-156, 2004.

	67	Kurtzke, John F. "Disability Rating Scales in Multiple Sclerosis," <i>Annals New York Academy of Sciences</i> , Vol. 36, pp. 347-360, 1984.
	68	Karlsson, H. et al. "HERV-W-related RNA detected in plasma from individuals with recent-onset schizophrenia or schizoaffective disorder," <i>Molecular Psychiatry</i> , Vol. 9, pp. 12-13, 2004.
	69	Qiu, Zhibiao et al. "Interleukin-6, $\beta$ -amyloid peptide and NMDA interactions in rat cortical neurons," <i>Journal of Neuroimmunology</i> , Vol. 139, pp. 51-57, 2003.
	70	Jenner, Peter. "Oxidative Stress in Parkinson's Disease," <i>Annals of Neurology</i> , Vol 53, Supp. 3, pp. S26-S38, 2003.
	71	Woodland, David L. "Human viral superantigens: to be or not to be transactivated?", <i>Trends in Immunology</i> , Vol. 23, No 5, p. 239, May 2002.
	72	Panzica, Michael R. "Innovations in Drug Delivery to the Central Nervous System," <i>Drugs of Today</i> , Vol. 35, No. 6, pp. 435-448, 1999.
	73	Merlo, A. et al. "Comparing monoclonal antibodies and small peptidic hormones for local targeting of malignant gliomas," <i>Acta Neurochir</i> , Vol. 88, Supp., pp. 83-91, 2003.
	74	Antony, Joseph M. et al. "Human endogenous retrovirus glycoprotein-mediated induction of redox reactants causes oligodendrocyte death and demyelination," <i>Nature Neuroscience</i> , Vol. 7, No. 10, pp. 1048-1095, October 2004.
	75	Ng, Philip C. et al. "Preparation and characterization of the Fab and F(ab') <sub>2</sub> fragments of aromatase activity-suppressing monoclonal antibody," <i>Steroids</i> , Vol. 62, pp. 776-781, 1997.
	76	Perron, H. et al. " <i>In Vitro</i> transmission and antigenicity of a retrovirus isolated from a multiple sclerosis patient," <i>Res Virol</i> , Vol. 143, pp. 337-350, 1992.
	77	Serra, C. et al. "Multiple sclerosis and multiple sclerosis-associated retrovirus in Sardinia," <i>Neurol Sci</i> , Vol. 22, pp. 171-173, 2001.
	78	Zawada, Mariola et al. "MSRV P/G Sequence Copy Number as a Potential Marker of Multiple Sclerosis," <i>Polish Journal of Pharmacology</i> , Vol. 55, pp. 869-875, 2003.
	79	Rolland, Alexandre. "Correlation between disease severity and <i>in vitro</i> cytokine production mediated by MSRV (Multiple Sclerosis associated Retro Viral element) envelope protein in patients with multiple sclerosis," <i>Journal of Neuroimmunology</i> , Vol. 160, pp. 195-203, 2005.
	80	Komaromy-Pradel, F. et al. "Molecular Cloning and Characterization of MSRV-Related Sequences Associated with Retrovirus-like particles," <i>Virology</i> , Vol. 260, pp. 1-9, 1999.
	81	Perron, H. et al. "Human endogenous retrovirus (HERV)-W ENV and GAG proteins: Physiological expression in human brain and pathophysiological modulation in multiple sclerosis lesions," <i>Journal of NeuroVirology</i> , Vol. 11, pp. 23-33, 2005.
	82	Blazar, Bruce R. et al. "Anti-CD3 F(ab') <sub>2</sub> Fragments Inhibit T Cell Expansion <i>In Vivo</i> During Graft-Versus-Host Disease or the Primary Immune Response to Nominal Antigen," <i>Journal of Immunology</i> , Vol. 159, pp. 5821-5833, 1997.
	83	Bird, Robert E. et al. "Single-Chain Antigen-Binding Proteins," <i>Science Reports</i> , Vol. 242, pp. 423-426, October 21, 1988.
	84	Arakawa, Fumiko et al. "Cloning and Sequencing the V <sub>H</sub> and V <sub>X</sub> Gene of an Anti-CD3 Monoclonal Antibody, and Construction of a Mouse/Human Chimeric Antibody," <i>Journal Biochem</i> , Vol. 120, pp. 657-662, 1996.
	85	Chaudhary, Vijay K. et al. "A recombinant immunotoxin consisting of two antibody variable domains fused to <i>Pseudomonas</i> exotoxin," <i>Nature</i> , Vol. 335, pp. 394-397, June 1, 1989.
	86	Mishra, Nirmal K. et al. "Continuous cultures of fused cells secreting antibody of predefined specificity," <i>Nature</i> , Vol. 256, pp. 495-550, August 7, 1971.
	87	Galfre, G. et al. "Antibodies to major histocompatibility antigens produced by hybrid cell lines," <i>Nature</i> , Vol. 256, pp. 550-552, August 7, 1971.
	88	Jiang, Qintai et al. "Cutting Edge: Lipopolysaccharide Induces Physical Proximity Between CD14 and Toll-Like Receptor 4 (TLR4) Prior to Nuclear Translocation of AP- $\kappa$ B," <i>Journal of Immunology</i> , Vol. 165, pp. 3541-3544, 2000.
	89	Lehnert, Seija. "The Toll-Like Receptor TLR4 is Necessary for Lipopolysaccharide-Induced Oligodendrocyte Injury in the CNS," <i>Journal of Neuroscience</i> , Vol. 22, No. 7, pp. 2478-2486, April 1, 2002.
	90	Serra, Caterina et al. " <i>In Vitro</i> modulation of the multiple sclerosis (MS)-associated retrovirus by cytokines: Implications for MS pathogenesis," <i>Journal of NeuroVirology</i> , Vol. 9, pp. 637-643, 2003.

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